**OCN Expt – 06**

Code:

clc; clear all; close all;

t=-5:0.0005:5;

z=0:pi/8:pi/2;

for k=1:length(t)

for m=1:length(z)

u(k,m)=sech(t(k))\*exp(1i\*z(m)/2); %% 1i - one I

v(k,m)=4\*(cosh(3\*t(k))+3\*exp(4\*1i\*z(m))\*cosh(t(k)))\*exp(1i\*z(m)/2)/(cosh(4\*t(k))+4\*cosh(2\*t(k))+3\*cos(4\*z(m)));

end

end

u=abs(u);

v=abs(v);

figure

ribbon(t,u,0.01)

xlabel('Time')

ylabel('Amplitude')

zlabel('Intensity')

figure

ribbon(t,v,0.01)

xlabel('Time')

ylabel('Amplitude')

zlabel('Intensity')

Output:

